

Amendments to the Claims

Please amend the listing of claims as follows:

1-37. (Cancelled)

38. (Previously Presented) A sialite binary wet cement, characterized by that it is composed of a “female body” and a “male body” both of which are produced, stored, and transported separately, and are mixed together when they are used, wherein the “female body” and the “male body” each have a specific surface area of 2800-7500 cm²/g, both of the “female body” and the “male body” is mainly composed of inorganic cementitious materials and water, and it is slurry, paste or wet powder form in a wet state during the whole period of its production, storage, transportation and usage;

proportion of the two components of the wet cement is that the “female body” ranges from 20% by weight to 99% by weight, the “male body” ranges from 1% by weight to 80% by weight;

in the “female body”, as proportion of its main constituents, CaO ranges from 1% by weight to 60% by weight, Al₂O₃ ranges from 1% by weight to 60% by weight, SiO₂ ranges from 2% by weight to 70% by weight, MgO ranges from 1.55 % by weight to 40% by weight, and Fe₂O₃ ranges from 0% by weight to 25% by weight; and

in the “male body”, pH=7-14, and as proportion of its main constituents, CaO ranges from greater than 0% by weight to 80% by weight, SO₃ ranges from greater than 0% by weight to 55% by weight, and R₂O ranges from greater than 0% by weight to 80% by weight, and R is an alkali metal .

39. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that the alkali metal of the “male body” is K and/or Na.

40. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that the proportion of the two components of the wet cement is that the “female body” ranges from 60% by weight to 99% by weight, the “male body” ranges from 1% by weight to 40% by weight.

41. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that the proportion of the two components of the wet cement is that the “female body” ranges from 70% by weight to 95% by weight, the “male body” ranges from 5% by weight to 30% by weight.

42. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that the “female body” or/ and the “female body” further comprise a regulating agent which is added during production period or/and after production of the “female body”.

43. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, in the “female body”, as the proportion of its main constituents, CaO ranges from 20% by weight to 55% by weight, Al₂O₃ ranges from 2% by weight to 25% by weight, SiO₂ ranges from 20% by weight to 50% by weight, MgO ranges from 4 % by weight to 13% by weight, and Fe₂O₃ ranges from 0% by weight to 12% by weight.

44. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, in the “male body”, as the proportion of its main constituents, CaO ranges from greater than 0% by weight to 40% by weight, SO₃ ranges from greater than 0% by weight to 40% by weight, and R₂O ranges from greater than 0% by weight to 20% by weight.

45. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that the “female body” is a wet material produced by wet-milling one or more selected from amorphous or/and microcrystal iron-making slag, steel-making slag, blast furnace slag, fly ash, waste glass, phosphorus slag, titanium slag, fluorite slag, burned coal fines slage, and their mixtures, as well as water and a regulating agent.

46. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that the “female body” is a wet material produced by mixing amorphous or/and microcrystal coal-burning boiler slage together with water and a regulating agent, and then carrying out a wet-milling step.

47. (Currently Amended) The sialite binary wet cement according to ~~claim 9~~ claim 46, characterized by that, the amorphous or/and micro-crystal coal-burning boiler slag is manufactured by “adding calcium in the fuel” method comprising the following steps:
getting boiler slags from various industrial boilers which take coal as its fuel,
adding a given amount of quick lime, slaked lime and lime stone and a small amount of mineralizing agents,
melting slags at a high temperature during deslagging process (when the slag is inside hearth or is departing from hearth) or during the treatment process following after the deslagging step so as to melt partially or entirely the discharged slag, and
then carrying out a rapidly cooling step so as to form amorphous or/and micro-crystal material.

48. (Currently Amended) The sialite binary wet cement according to ~~claim 9~~ claim 46, characterized by that, the amorphous or/and micro-crystal coal-burning boiler slag is manufactured by “adding calcium in the slag” method comprising the following steps:
getting boiler slags from various industrial boilers which take coal as its fuel,
adding a given amount of quick lime, slaked lime and lime stone and a small amount of mineralizing agents into the coal ash and slag discharged after being burned,
melting the ash and slag at a high temperature during deslagging process or during the treatment process following after the deslagging step so as to melt partially or entirely the discharged ash and slag, and
then carrying out a rapidly cooling step so as to form amorphous or/and micro-crystal material.

49. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, the “femal body” is a wet material produced by taking the amorphous or/and microcrystal glass substance located in the zone between Portland cement and glass in the $\text{CaO-Al}_2\text{O}_3\text{-SiO}_2$ ternary phase diagram as starting material, and obtaining a microcrystal and/or vitreous substance having potential water-hardening activity through the steps of starting materials selecting, formulating, mix-milling, calcining and melting, then mixing the obtained substance together with water and regulating agents, and carrying out a wet-milling step.

50. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, the “female body” is a wet material produced by mixing one or more selected from shale, clay, coal gangue and their mixtures calcined and dewatered at ~~500-1000~~ 500-1000 degrees centigrade, together with water and regulating agents, then carrying out a wet-milling step.

51. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, the “female body” is a wet material produced by mixing one or more selected from waste bricks, waste tiles and waste ceramics, and their mixtures, together with water and a regulating agent, then carrying out a wet-milling step.

52. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, the starting material of the “female body” is one or more selected from pozzolana, pearlite, obsidian, pumice, sand stone, quartz sand, mine tailing, zeolite, silica fume and their mixtures.

53. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that the “male body” is a wet material produced by mixing one or more selected from natural anhydrite, dihydrate gypsum, hemihydrate gypsum, phosphogypsum, fluorgypsum, salt gypsum, lime, calcium hydroxide, chemical industry lime, strong alkali, strong alkali salt, cement clinker and their mixtures, together with water and a regulating agent.

54. (Currently Amended) The sialite binary wet cement according to ~~claim 5~~ claim 42, characterized by that, the regulating agents for regulating solidifying time and working characteristics of the “male body” and “female body” are made of one or more selected from sugars, honeys, citric acid and citrate, tartaric acid and tartrate, strong alkali, dissolvable carbonate, muriate, dissolvable silicate, dissolvable sulfate, water glass, chlorinate, lignosulphonate, boric acid, borate and their mixtures.

55. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, water content of the “female body” is from greater than 0.1% to 95% by weight.

56. (Currently Amended) The sialite binary wet cement according to ~~claim 18~~ claim 55, characterized by that, the water content of the “female body” is from 10% to 80% by weight.

57. (Currently Amended) The sialite binary wet cement according to ~~claim 19~~ claim 56, characterized by that, the water content of the “female body” is from 25% to 70% by weight.

58. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, when a wet-milling is used, water content of the “male body” is from greater than 0% to 95% by weight.

59. (Currently Amended) The sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, when a wet-milling is used, the water content of the “male body” is from 15% to 85% by weight.

60. (Currently Amended) The sialite binary wet cement according to ~~claim 22~~ claim 59, characterized by that, when a wet-milling is used, the water content of the “male body” is from 25% to 70% by weight.

61. (Currently Amended) The sialite binary wet cement according to ~~claim 5~~ claim 42, characterized by that, amount of the regulating agent is from greater than 0 % to 10% by weight based on total dry weight of the “male body” and “female body”.

62. (Currently Amended) The sialite binary wet cement according to ~~claim 24~~ claim 61, characterized by that, amount of the regulating agent is from greater than 0 % to 5% by weight based on total dry weight of the “male body” and “female body”.

63. (Currently Amended) A method for producing the sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, under the premise of satisfying a required specific surface area, using different combinations of machines suitable to wet-crushing and wet-milling, and using a method called “mixing first, then milling” in which starting materials of the “female body” and starting materials of the “male body” are mixed first in their own proportions respectively and then they are wet-crushed and wet-milled so as to obtain a wet material respectively; and storing and transporting separately the obtained wet materials for the “female body” and “male body”.

64. (Currently Amended) A method for producing the sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, under the premise of satisfying a required specific surface area, using different combinations of machines suitable to wet-crushing and wet-milling, and using a method called “milling first, then mixing” in which starting materials of the “female body” and “male body” are wet-crushed and wet-milled first respectively according to grindability, then mixing and homogenizing the levigated starting material in their own proportions so as to obtain a wet material respectively; and storing and transporting separately the obtained wet materials for the “female body” and “male body”.

65. (Currently Amended) A method for using the sialite binary wet cement according to one of ~~claim 1~~ claim 38, characterized by that, mixing the “female body” and “male body” of the wet cement together with water and aggregate to produce concrete.

66. (Currently Amended) The use of the sialite binary wet cement according to ~~claim 28~~ claim 65, characterized by that, the aggregate is selected from one or more of mountain sand, river sand, sea sand, gobi sand, crushed stone, bulk stone, waste stone, coal gangue, clay, mineral classified sand, whole mineral tailings, industrial waste slag and their mixtures.

67. (Currently Amended) A method for using the sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, mixing the “female body” and “male body” to cause a hydrating reaction and a chemical reaction between liquid phase and solid phase, thereby forming cementitious materials which is one of crystal type, gel type, network type or their mixtures.

68. (Currently Amended) A method for using the sialite binary wet cement according to ~~claim 1~~ claim 38, characterized by that, the cement is used in building, traffic, water conservancy, mine backfill and timbering, subgrade strengthening or underground engine